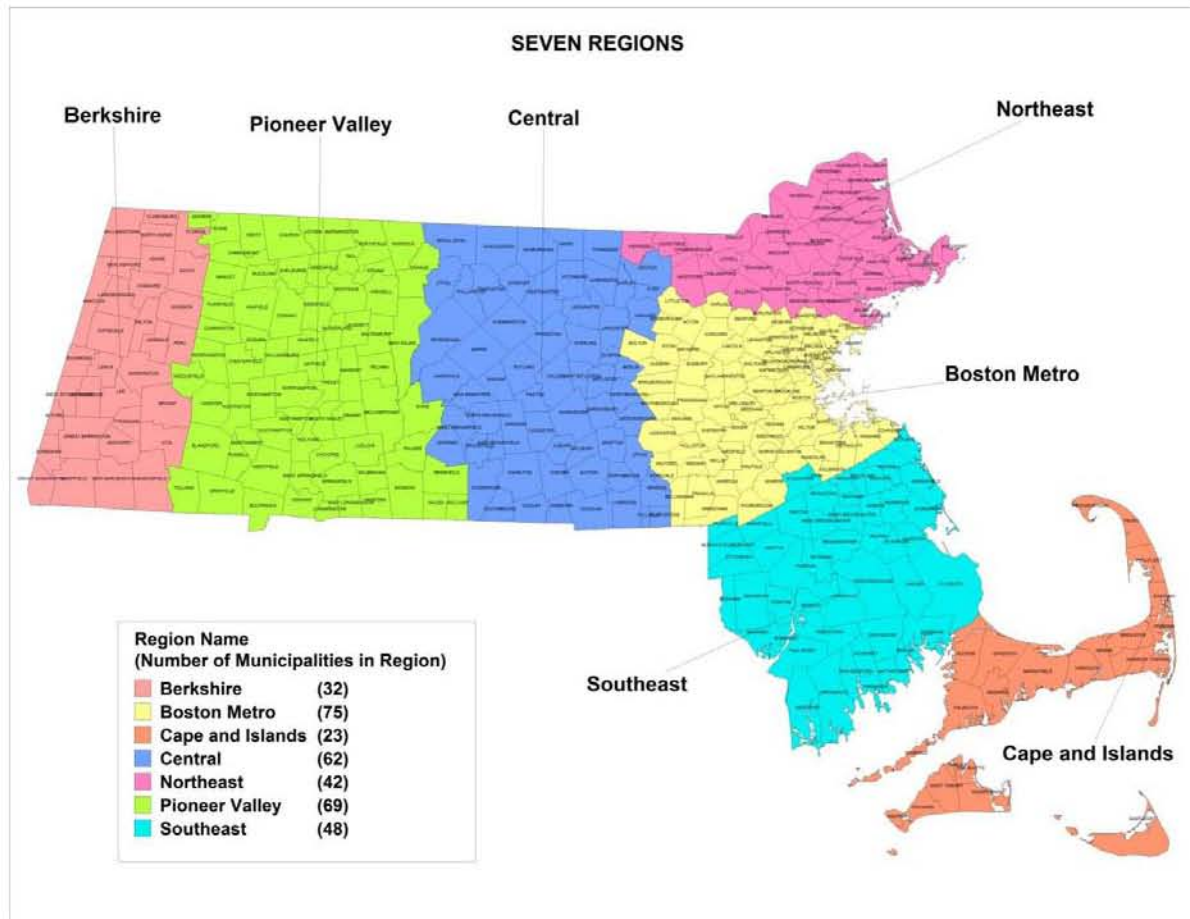


Massachusetts Statewide Data

Figure 1: Region Demarcation



I. Wireline Residential Voice Data

Table 1: Summary of MA ILEC Service Availability

ILEC	Towns Covered	Households Covered
Verizon	347	2,437,717 (99.9%)
Granby Telephone	Granby	2,254
Richmond Telephone	Richmond	637
Taconic Telephone	Hancock	290
Sentinel Tree Telephone	Gosnold	46
Total Independent ILECs	4	3,227 (0.1%)
ALL ILECs	351	2,440,944 (100%)

Figure 2: MA ILECs' Service Territories

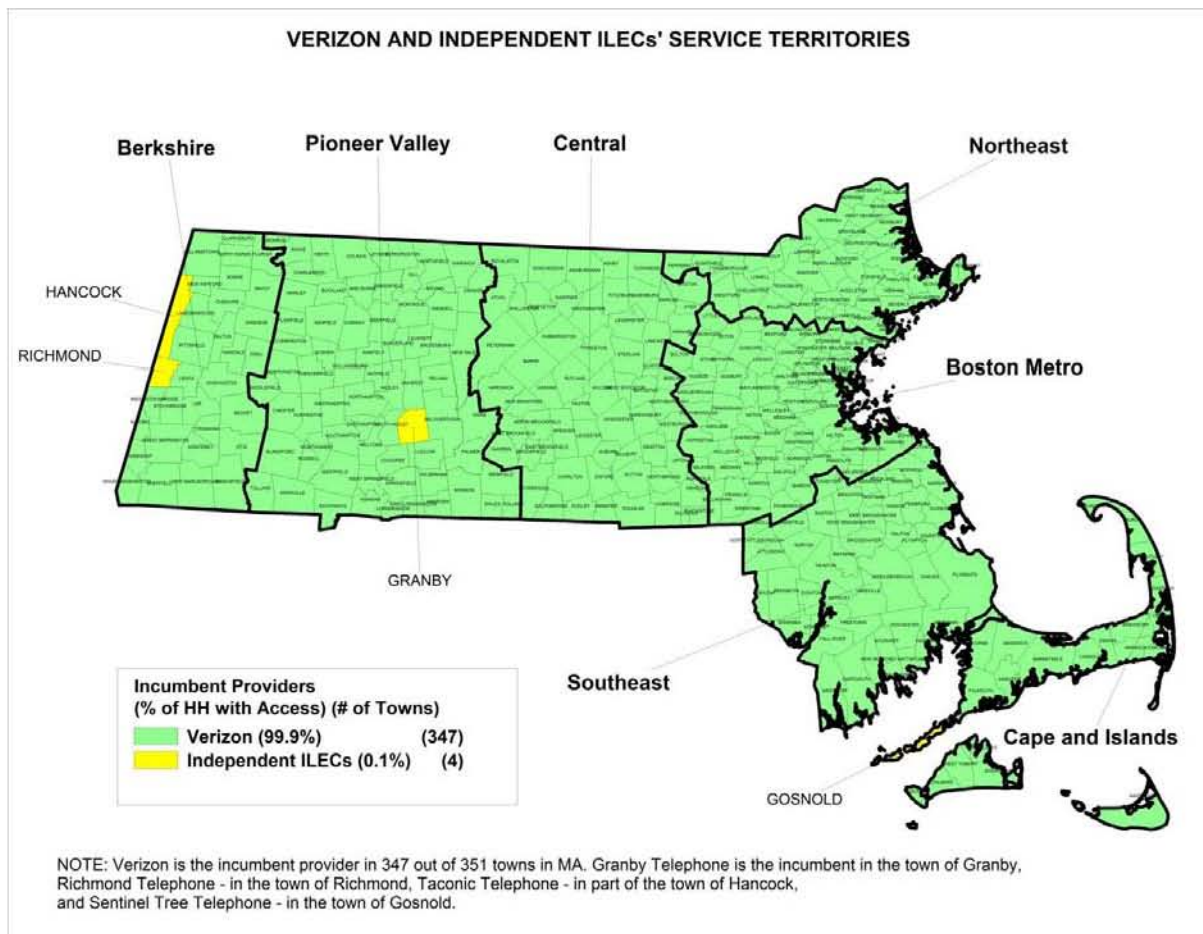


Figure 3: ILEC Residential Lines, June 2005-December 2007

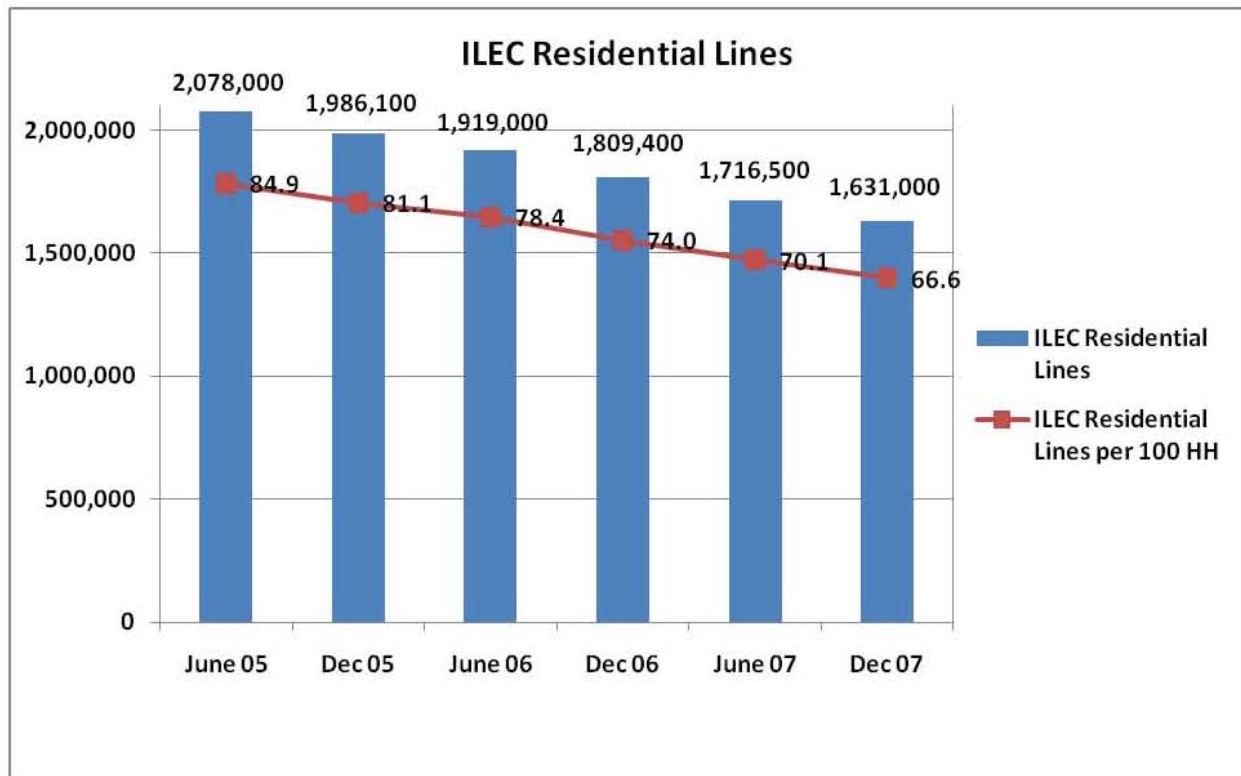


Figure 4: Distribution of CLEC Residential Voice Lines by Platform Type, June 2005-December 2007

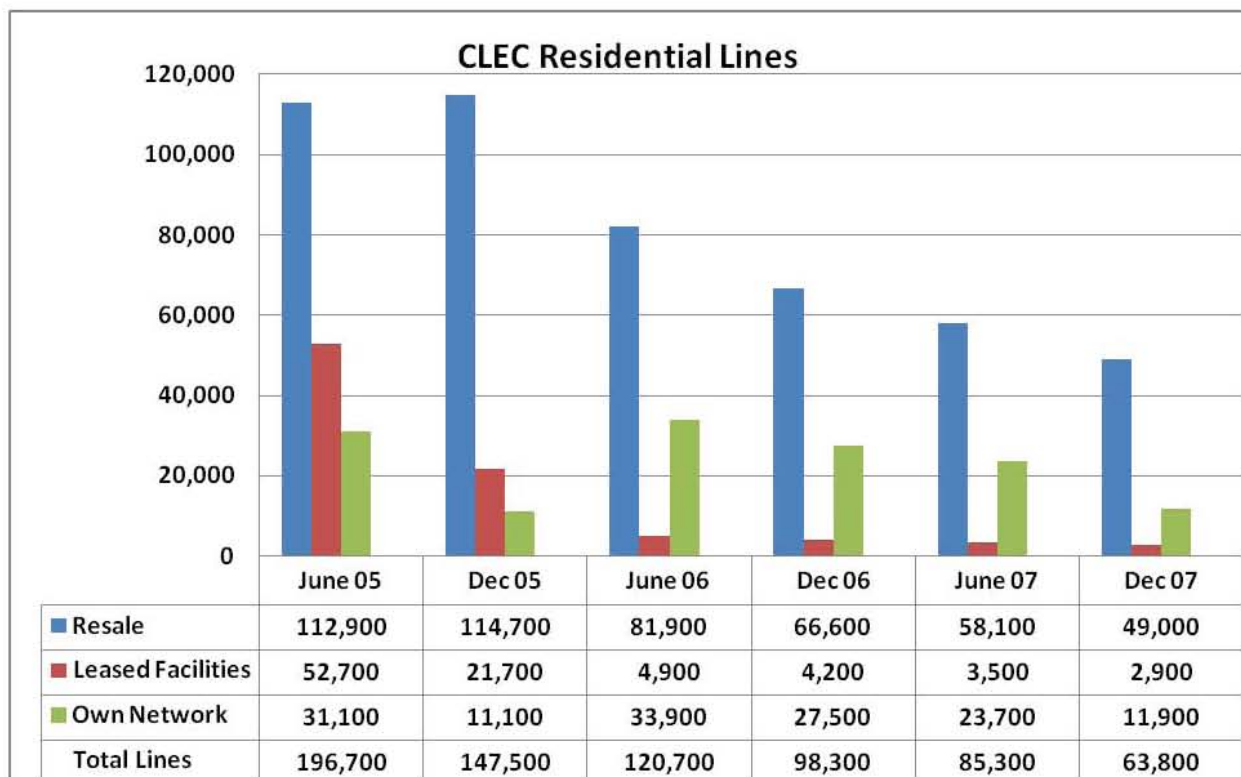


Figure 5: Residential Cable Voice Lines, June 2005-December 2007

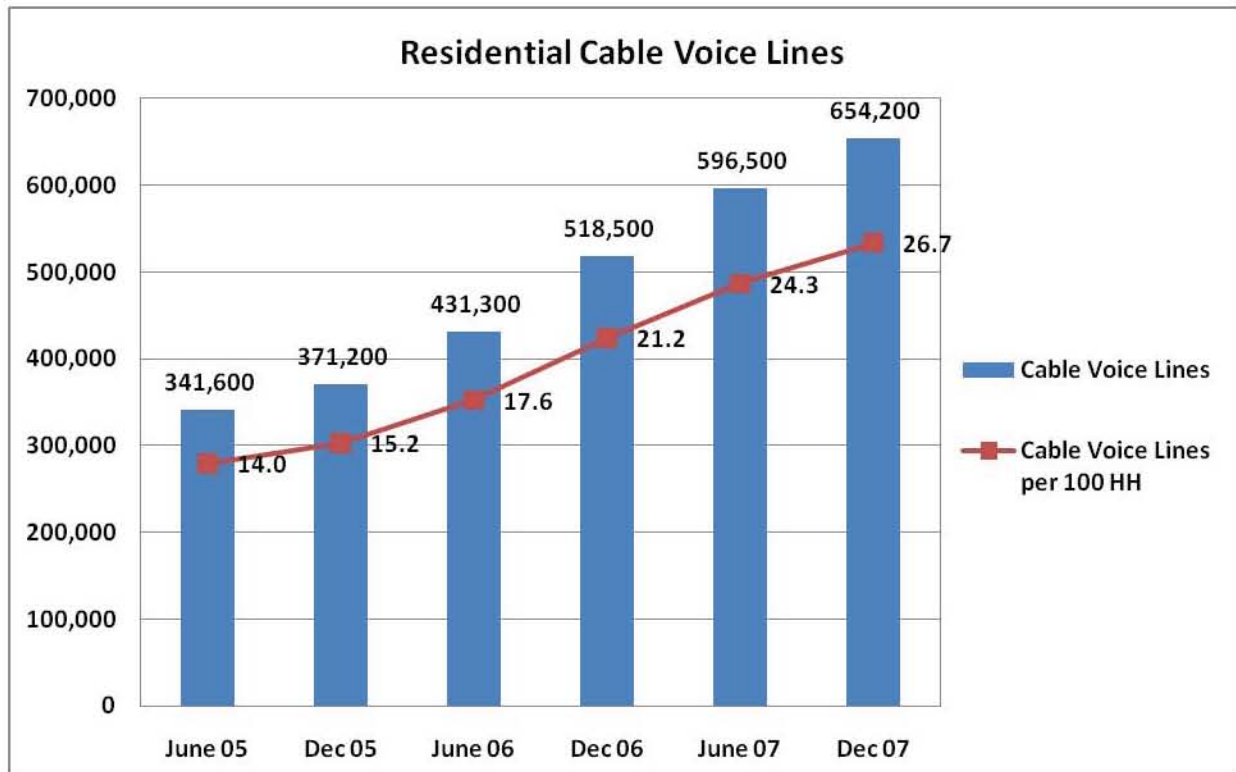


Table 2: Summary of Residential Cable Voice Availability, 2008

Competitors	Region	Availability
No Cable Voice provider	Commonwealth	70,000 households (2.9%)
	<i>Regional Distribution:</i>	
	Boston Metro	31.7%
	Pioneer Valley	22.9%
	Central	15.1%
	Berkshire	11.6%
Two providers	Commonwealth	508,800 households (20.8%)
	Concentrated in Boston Metro	100%

Figure 6: Distribution of Wireline Residential Voice Lines by Platform Type, June 2005-December 2007

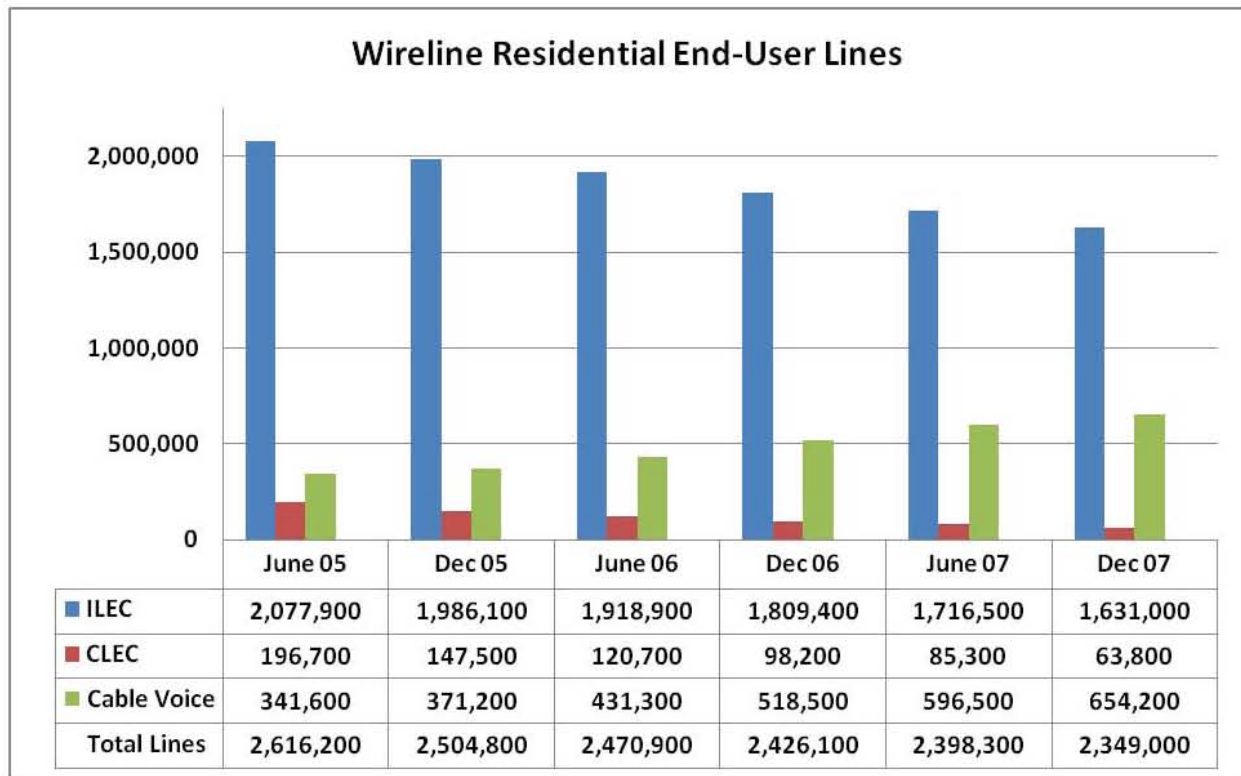
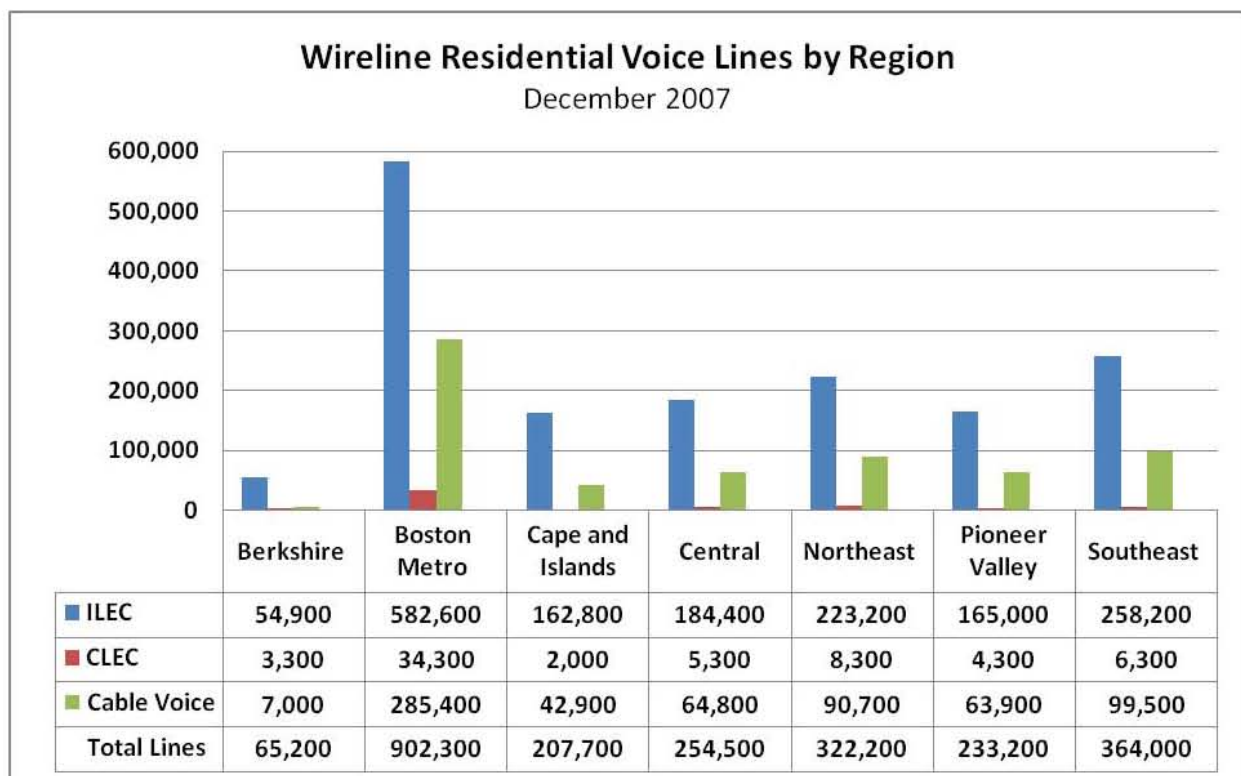


Figure 7: Distribution of Wireline Residential Voice Lines by Region, December 2007



II. Wireless Voice Data

Figure 8: Wireless Voice Service Availability in Massachusetts, December 2008

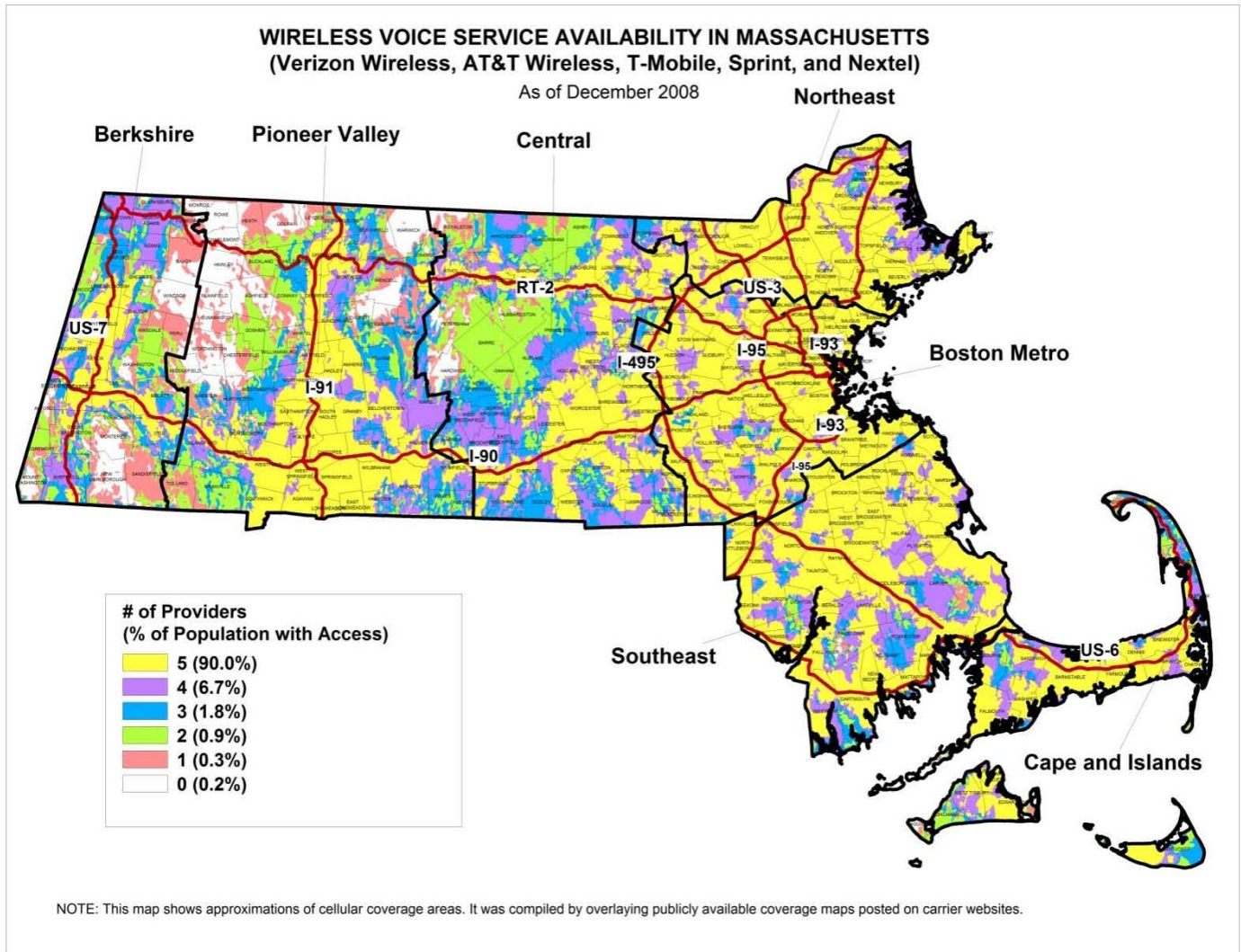
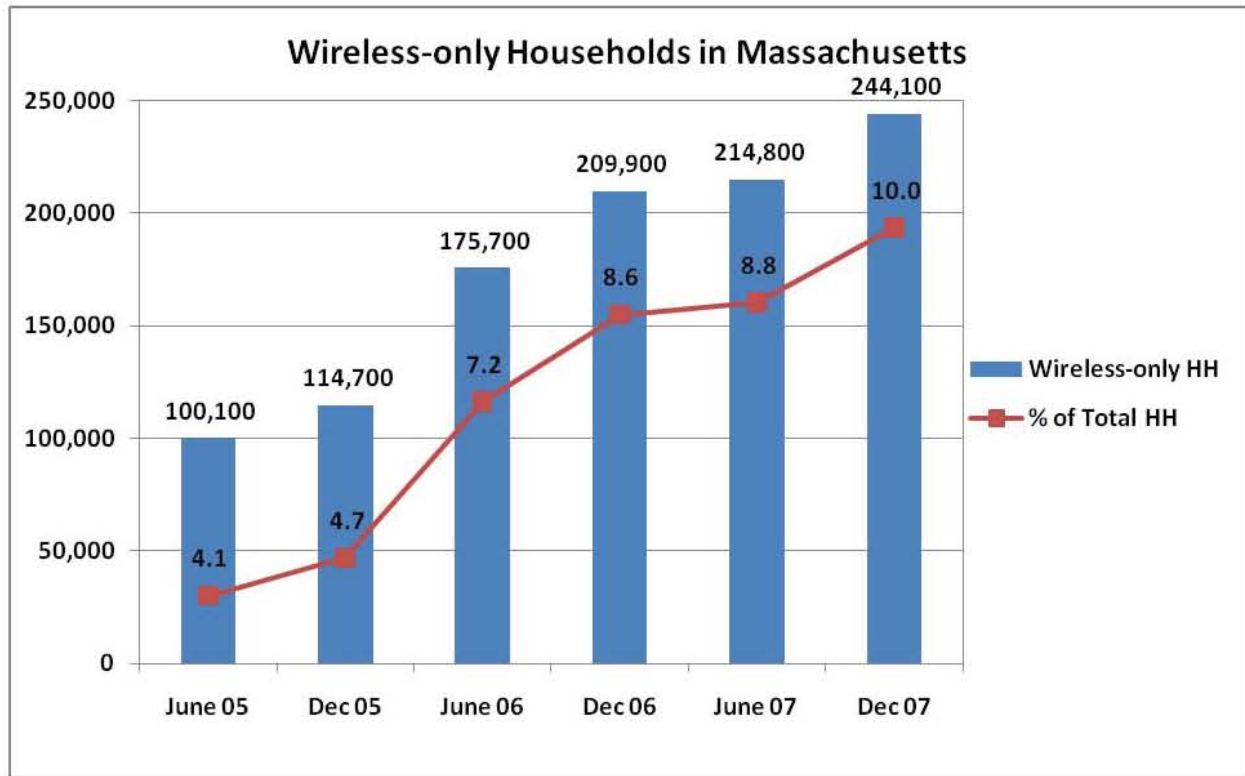


Figure 9: Wireless-only Households, June 2005-December 2007



III. Cable Video Data

Figure 10: Cable Video Service, All Active Providers, December 2007

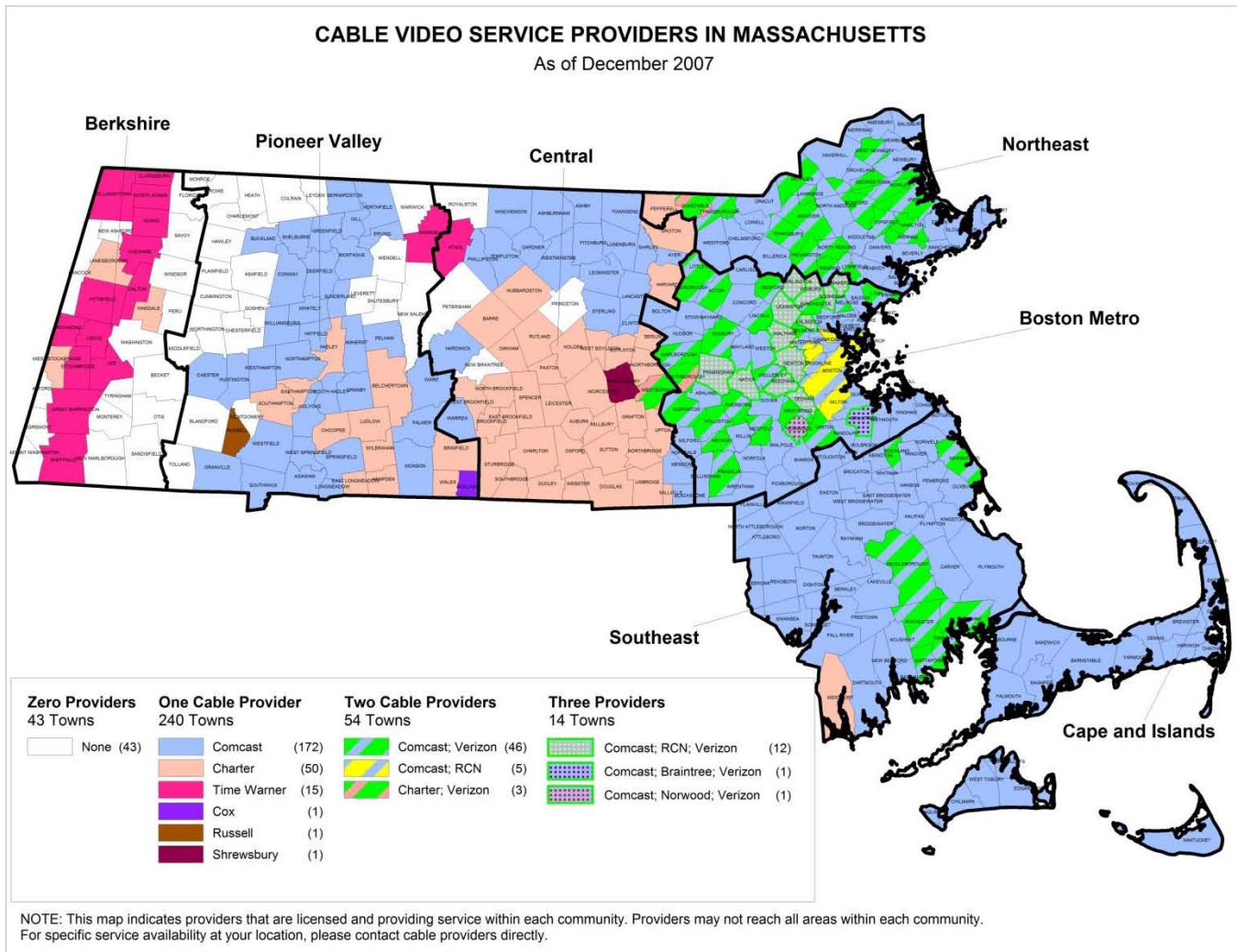
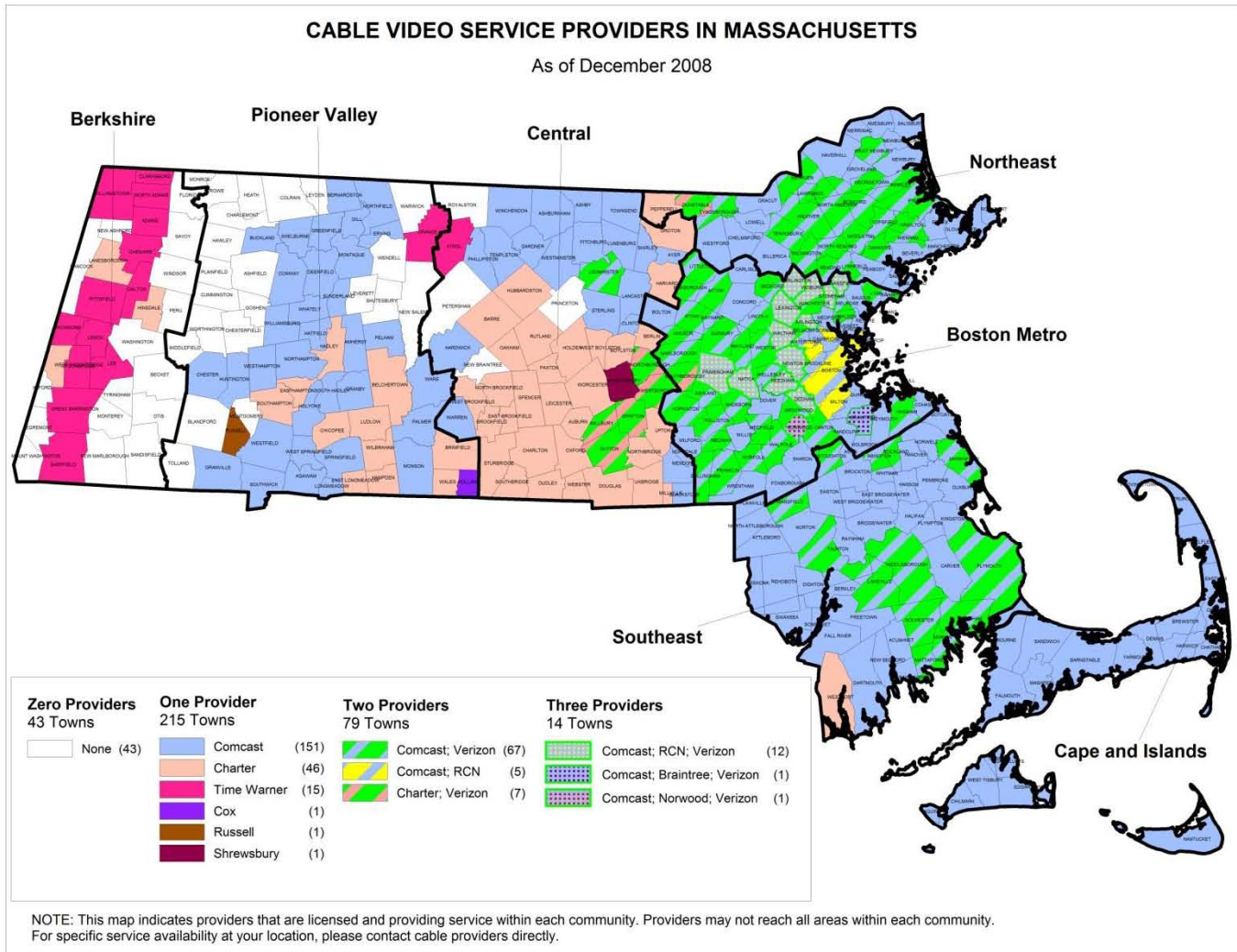


Figure 11: Cable Video Service, All Active Providers, December 2008



Methodology

1. Residential Wireline Voice Service

1.1 Availability

ILEC covered: **Method:** As a "Provider of Last Resort," ILEC is obligated to offer service to every household within the ILEC territory. Estimating number of households with access to Verizon's and Independent ILECs' services, by overlaying Massachusetts Geographic Information Systems (MassGIS) LandUse to Housing Allocation Data with MassGIS Community Boundaries. **Sources:** (1) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery); (2) MassGIS Community Boundaries Map. **Confidentiality of Data:** (1) None, MassGIS data is publicly available; (2) None, MassGIS data is publicly available.

Cable Voice Covered: **Method:** Overlay maps identifying location of cable plant with map identifying point-specific locations of residential structures to calculate number of homes passed by cable plant for cable video service, then subtracting the number of homes passed in those communities where the cable provider does not offer cable telephony. **Sources:** (1) Cable Strand maps provided by individual carriers (BELD, Charter, Comcast, Cox, Norwood, RCN, Shrewsbury, and Time Warner) as of Summer 2008; (2) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery); (3) 2008 Cable Rate Cards to identify those communities where cable voice is a service offering. **Confidentiality of Data:** (1) None, cable plant maps for all cable companies are publicly available per statutory requirement as part of the cable licensing process. (2) None, MassGIS data is publicly available; (3) None, Cable Rate Cards are publicly available. **Potential Errors:** (1) When overlaying cable plant maps with Land Use maps, there is potential that not all cable strands are properly aligned to the corresponding streets, which in some areas may cause an overestimation of houses passed, and in other areas may cause an underestimation of households passed; (2) Land Use as of 1999, does not account for new housing growth since 1999;¹ (3) Estimates calculated availability if a housing structure is within 200 feet of the cable strand, actual obligation for cable provider to offer service is dictated according to requirements specified in each cable license, of which 200 feet from cable strand was determined to be representative.

1.2 Adoption

ILEC Adoption: **Method:** (a) Statewide subscriber data from FCC Form 477, including statewide split of residential and business subscribers; (b) regional allocation derived by (b1) allocating wire center distribution of access lines reported in Verizon Service Quality Index Report, then (b2) calculating number of Verizon statewide business lines per employee in Massachusetts; applying statewide coefficient to the number of employees in each region to determine number of business lines in each regions, and (b3) obtain estimate of residential lines within each region as a balancing item from subtracting regional business lines as calculated in b2 from total lines in Region as calculated in b1; (c) Regional employee data used in b2 is obtained from the total number of employees reported by the Massachusetts Executive Office of Labor and Workforce Development on 16 Workforce Investment Areas (WIA). WIA to region distribution is done using town level employee data for 24 Massachusetts towns; (d) add Independent ILEC² (Richmond Telephone Company, Taconic Telephone, and Granby Telephone) residential and business lines from FCC Form 477 to obtain total ILEC lines on region level. **Sources:** (1) FCC Form 477 December 2007; (2) Verizon Service Quality Index Report, December 2007; (3) Massachusetts Executive Office of Labor and Workforce Development, March 2008. **Confidentiality of Data:** (1) Only statewide platform (ILEC/CLEC) level data is publicly available from FCC Form 477; DTC entered non-disclosure agreement for company-specific zip code data as reported by carriers; (2) None, Verizon Service Quality Index Monthly Reports are publicly available; (3) None, Data from the Labor and Workforce Development Office are publicly available. **Potential Errors:** (a) For purposes of reporting information for Form 477, there is a potential that carriers are not calculating subscriber counts in uniform fashion; for example, some carriers may be reporting the number of voice-grade equivalent lines provided while others are reporting the number of unique addresses served. The FCC has attempted to clarify its instructions for calculating subscriber counts beginning with the June 2008 reporting period; (b) regional estimates of Verizon's business lines as described in b2 may not be accurate as the coefficient of the number of employees per Verizon's business line may not be uniform throughout the regions.

¹ This note is true for all the methods where this datasource has been used.

² No data are available for Sentinel Tree Company on FCC Form 477.

Cable Voice Adoption: Method: Statewide subscriber data obtained from E911 filings; to determine regional allocation of cable telephony adoption, we applied the allocation factor for each cable company's region specific distribution of cable video adoption, adjusting for those communities without cable telephony. For residential and business breakdown of cable voice subscribers the Staff used the statewide percent of residential cable voice subscribers from FCC form 477 as of December 2007. **Sources:** (1) SETB E911 database, 2007; (2) Annual Cable Franchise Fee Filing, 2007; (3) FCC Form 477 December 2007. **Confidentiality of Data:** (1) Company specific data reported to E911 database is proprietary; (2) None, Annual Cable Franchise Fee filings are publicly available; (3) Only statewide platform (ILEC/CLEC) level data is publicly available from FCC Form 477; DTC entered non-disclosure agreement for company-specific zip code data as reported by carriers. **Potential Errors:** (a) Regional allocation of cable voice subscribers assumes uniform timing for availability of cable voice offering throughout Massachusetts and also assumes adoption rate for cable voice correlates with adoption rate of cable video. (b) According to the current FCC form 477 instructions, not all cable companies provide their cable voice "IP" customer counts. Applying the percent of residential cable voice subscribers from the FCC Form 477 to E911 data might not be an accurate measure of residential and business cable voice subscribers in Massachusetts.

Reseller Adoption: Method: Statewide subscriber data and distribution of residential and business subscribers derived from FCC Form 477; regional allocation calculated by regionally allocating each Reseller's utilization of numbers as determined by North American Numbering Plan Administration's (NANPA) Numbering Resource Utilization Forecast (NRUF) database. For those Resellers that do not obtain numbers directly from NANPA, the regional allocation of their statewide residential and business end-user lines is calculated based on regional proportions of total population adjusted to include only those zip codes in which they reported to provide services. **Sources:** (1) FCC Form 477, December 2007; (2) NRUF database, August 2007; (3) MassGIS LandUse to Population Allocation Data (2000 US Census Bureau population data allocated over 1999 Land Use ortho imagery). **Confidentiality of Data:** (1) Only statewide platform (ILEC/CLEC) level data is publicly available from FCC Form 477; DTC entered non-disclosure agreement for company-specific zip code data as reported by carriers; (2) Proprietary, DTC entered into non-disclosure agreement with NANPA for company-specific number utilization data, however 1000-number block level assignments are made publicly available by NANPA; (3) None, MassGIS data is publicly available. **Potential Errors:** (1) NRUF database may overestimate numbers assigned to carriers as it may include numbers that carriers provide to unaffiliated carriers, such as VoIP providers. Where possible, we made corrections to mitigate this error where this practice was voluntarily noted by carriers. (2) For purposes of reporting information for Form 477, there is a potential that carriers are not calculating subscriber counts in uniform fashion; for example, some carriers may be reporting the number of voice-grade equivalent lines provided while others are reporting the number of unique addresses served. The FCC has attempted to clarify its instructions for calculating subscriber counts beginning with the June 2008 reporting period. (3) Several Resellers do not obtain phone numbers directly from NANPA database, therefore allocation is estimated based upon population of zip codes served by each of the providers, there is no reason to think that error is systemic in one direction.

Leased Facilities Adoption: Methodology is similar to the Reseller Adoption.

Own Network Adoption: Methodology is similar to the Reseller Adoption.

2. Wireless Voice Service

2.1 Availability

Wireless Covered: **Method:** Overlaying joint wireless coverage maps of five wireless providers with map identifying point-specific locations of residential structures. **Sources:** (1) Wireless coverage maps provided by carriers (AT&T, Sprint Nextel Corporation and T-Mobile) and available via carrier websites (Verizon) as of November 2008; (2) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery). **Note:** The DTC's coverage estimates are based upon an aggregation of the carriers' marketed coverage areas and have not be independently verified by the DTC. **Confidentiality of Data:** (1) None, coverage maps publicly available via carrier websites; (2) None, data publicly available from MassGIS.

2.2 Adoption

Wireless Substitution: **Method:** For Wireless Substitution estimate, the Department has applied the Centers for Disease Control and Prevention's Northeast Region (includes Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania) estimated rate of adults living in wireless-only households to the total Massachusetts population of age 18 and over and adjusted that number by the average number of adults living in a household. **Sources:** (1) Centers for Disease Control and Prevention's National Health Interview Survey, July-December 2007, (2) U.S. Census Bureau; (3) U.S. Census Bureau's 2007 American Community Survey (ACS) estimates for Massachusetts counties. **Confidentiality of Data:** (1) None, publicly available from CDC; (2) None, U.S. Census Bureau data are publicly available. (3) ACS estimates are publicly available. **Potential Errors:** Wireless Substitution estimate based on the Northeast region may over- or underestimate wireless substitution taking place in Massachusetts.

3. Video Services

3.1 Availability (Town-by-Town)

Cable Licenses by Municipality **Source:** Filed with DTC by municipalities. **Confidentiality of Data:** None.